

6/93



550718

ecology and environment, inc
S I T E S A F E T Y P L A N

522

Version 988

A. GENERAL INFORMATION

Project Title: 915 S KILDARE Project No.: 2T2051
 TDD/Fan No.: T05-9406-024/E110841SAA
 Project Manager: Mike C Mangini Project Dir.: Tom Kouzis
 Location(s): 915 S. Kildare
 Prepared by: Mike C Mangini Date Prepared: 8/2/94
 Approval by: [Signature] Date Approved: 8/2/94
 Site Safety Officer Review: [Signature] Date Reviewed: 8/2/94
 Scope/Objective of Work: Site assessment - air monitoring; written & photo documentation;
multi-media sampling (drom, debris, puddled water)
 Proposed Date of Field Activities: 8/3/94 8/16/94
 Background Info: Complete: ☐ Preliminary (No analytical data available) ☒

Documentation/Summary:

Overall Chemical Hazard:	Serious <input type="checkbox"/>	Moderate <input type="checkbox"/>
	Low <input type="checkbox"/>	Unknown <input checked="" type="checkbox"/>
Overall Physical Hazard	Serious <input checked="" type="checkbox"/>	Moderate <input type="checkbox"/>
	Low <input type="checkbox"/>	Unknown <input type="checkbox"/>

B. SITE/WASTE CHARACTERISTICS

Waste Type(s):

Liquid ☒ Solid ☒ Sludge ☐ Gas/Vapor ☒

Characteristic(s):

Flammable/ Ignitable ☒ Volatile ☒ Corrosive ☐ Acutely Toxic ☐
 Explosive ☒ Reactive ☐ Carcinogen ☐ Radioactive* ☐

Other: _____

Physical Hazards:

Overhead ☒ Confined* ☐ Below Grade ☒ Trip/Fall ☒
 Puncture ☒ Burn ☐ Cut ☒ Splash ☐
 Noise ☐ Heat/Cold ☒ Other: _____
 Stress

*Requires completion of additional form and special approval from the Corporate Health/Safety group. Contact RSC or HQ.
 H5018A(04/02/91)

Site History/Description and Unusual Features (see Sampling Plan for detailed description): The site is an illegal a very large illegal dump of construction materials covering an entire block in the City of Chicago.

Locations of Chemicals/Wastes: There are said to be underground tanks on the site. 55 gallon drums might be present.

Estimated Volume of Chemicals/Wastes: There are over 30,000 tons of construction debris on site, but other material (chemicals) are unknown.

Site Currently in Operation

Yes: () No: ()

----- There is currently a city-lead removal action occurring at the site. -----

C. HAZARD EVALUATION

List Physical Hazards by Task (i.e., drum sampling - explosion hazard, drilling - noise hazard, etc.) and number them. (Task numbers are cross-referenced in Section D)

Task/Physical Hazard Evaluation: 1. Site recon - heat stress, slip/trip/fall, overhead, below grade, puncture
2. Air monitoring: heat stress, slip/trip/fall, overhead, below grade, puncture
3. drum sampling: heat stress, splash, cut, puncture, below grade.
4. debris sampling: heat stress, slip/trip/fall, cut, puncture, below grade

5.

6.

7.

8.

Chemical Hazard Evaluation:

Compound	PEL/TWA	Route of Exposure	Acute Symptoms	Odor Threshold	Odor Description
DIESEL	—	IN, IH, E, SK	IR, F, RT, DZ, H, N		DIESEL SMELL
FUEL OIL #4	—	IN, IH, E, SK	"		OILY SMELL
FUEL OIL #2	—	"	"		"
TOLUENE	100 ppm	IN, IH, E, SK	IR, RT, F, H, DZ	1.6 ppm	aromatic
TCE	50 ppm	IN, IH, E, SK	CF, DZ, H, FS	21.4 ppm	sweet

Note: Complete and attach a Hazard Evaluation Sheet for major known contaminants. Codes for C.H.E. below:

AB = ABDOMINAL PAIN
AC = ACHES
AN = ANEMIA
BV = BLURRED VISION
C = COUGHING
W = WEAKNESS
H = HEADACHES
SB = SHORTNESS OF BREATH

DA = DERMAL ABSORPTION
DI = DIARRHEA
DS = DISTRESSED STOMACH
DP = CNS DEPRESSION
DR = DROWSINESS
CD = CONTACT DERMATITIS
LC = LOSS OF CONSCIOUSNESS
OTHER: CF confusion

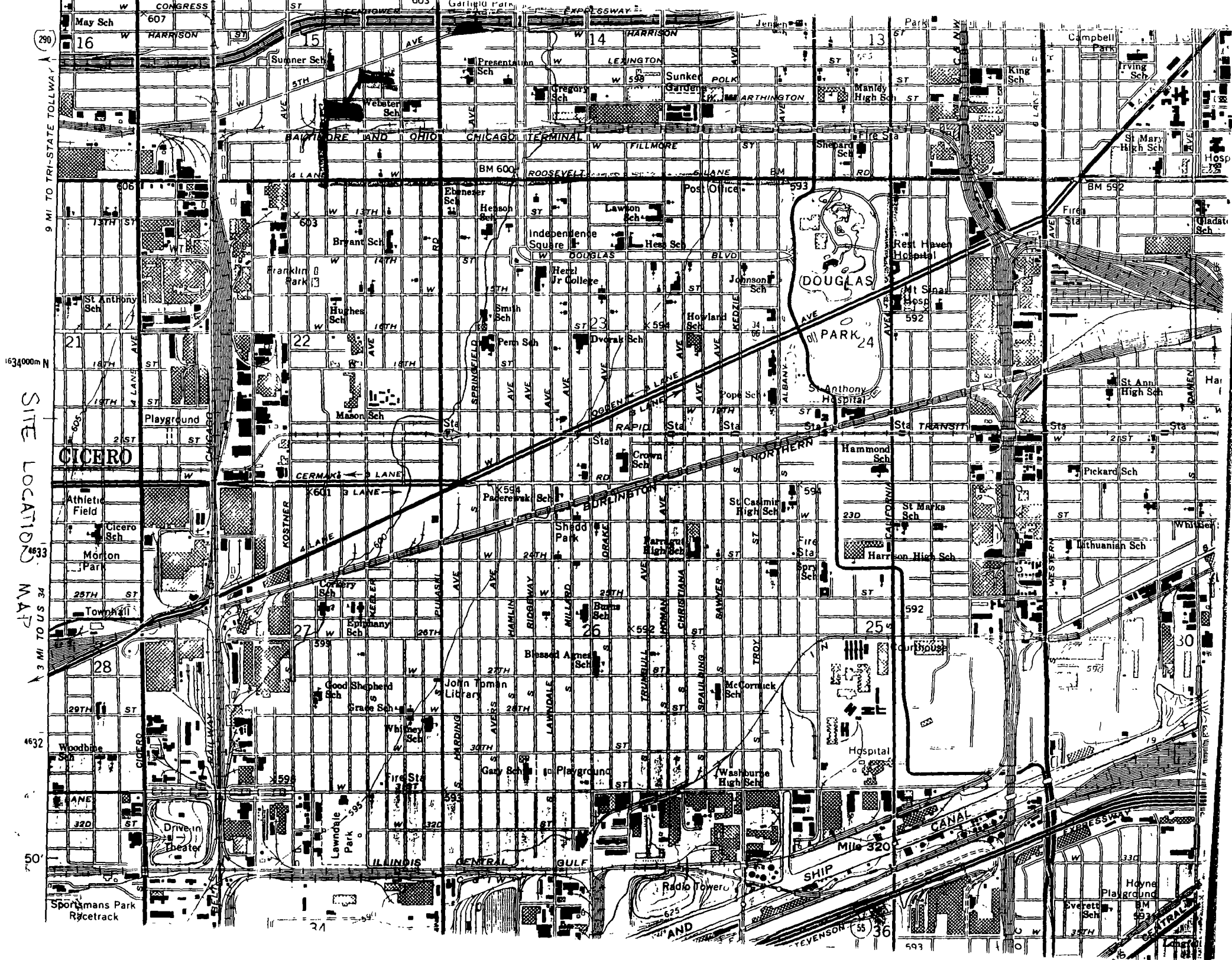
IH = INHALATION
IN = INGESTION
IR1 = IRR OF E/M/THROAT
IR = IRRITATION
E = EYES
DZ = DIZZINESS
RT = RESPIRATORY TRACT
FS = FLUSHED SKIN

A = OCULAR
SK = SKIN CONTACT
U = ULCERATION
V = VOMITING
M = MOUTH
CP = CHEST PAIN
N = NAUSEA

Site Name _____
Job No. _____
TDD/PAN _____

SITE HISTORY (Continued)

John Christopher is notorious Chicago businessman (AKA. Keis Jon) is listed as the registered agent for Crush-All Inc. the company that allegedly dumped the material at the 915 S. Kildare site.



D. SITE SAFETY WORK PLAN

Site Control. Attach map, use back of this page, or sketch of site showing hot zone, contamination reduction, zone, etc.

Perimeter identified? [] [X] Site secured? [] [X]

Work Areas Designated? [] [X] Zone(s) of Contamination Identified? [] [X]

Personnel Protection (TLD badges required for all field personnel):

Anticipated Level of Protection (Cross-reference task numbers to Section C):

	A	B	C	D
Task 1			X	↗
Task 2			X	↘
Task 3		X		
Task 4		↖	X	

(Expand if necessary)

Modifications:

Action Levels for Evacuation of Work Zone Pending Reassessment of Conditions:

- Level D: O_2 <19.5% or >25%, explosive atmosphere >10% LEL, organic vapors above background levels, particulates >N/A mg/m³, other _____.
- Level C: O_2 <19.5% or >25%, explosive atmosphere >25% LEL (California-20%), unknown organic vapor (in breathing zone) >5 ppm, particulates >N/A mg/m³, other _____.
- Level B: O_2 <19.5% or >25%, explosive atmosphere >25% LEL (California-20%), unknown organic vapors (in breathing zone) >500 ppm, particulates >N/A mg/m³, other _____.
- Level A: O_2 <19.5% or >25%, explosive atmosphere >25% LEL (California-20%), unknown organic vapors >500 ppm, particulates >N/A mg/m³, other _____.

Air Monitoring (daily calibration unless otherwise noted):

Contaminant of Interest	Type of Sample (area, personal)	Monitoring Equipment	Frequency of Sampling
Volatiles Organics	area	HNU	Continuous
radiation , O_2 , LEL	"	CG-1	Continuous
radiation	Personal	TLD	Continuous

(Expand if necessary)

Decontamination Solutions and Procedures for Equipment, Sampling Gear, etc.:

Non disposable sampling eqpt to be washed w/ Alconox soln. and triple rinsed. Air monitoring equipment will be wiped w/ paper towel w/ water, disposable equipment will be left on-site with osc/property owner permission.

Personnel Decon Protocol: Dry decon. All PPE will be double bagged and left on-site w/ permission of OSC/owner-operator. All personnel will wash hands w/ DI water ~~then~~ immediately before departure from site.

Decon Solution Monitoring Procedures, if Applicable: N/A

Special Site Equipment, Facilities, or Procedures (Sanitary Facilities and Lighting Must Meet 29 CFR 1910.120): All investigations will be conducted during daylight hours.

Site Entry Procedures and Special Considerations: Permission will be obtained prior to site entry. Stay upwind of contamination when possible. The buddy system will be maintained at all times.

Work Limitations (time of day, weather conditions, etc.) and Heat/Cold Stress Requirements:

Work is restricted to daylight hours only and workers are to be monitored for ~~heat~~ cold stress. When vermiculite is used to pack samples, dust masks will be worn.

General Spill Control, if applicable: N/A

Investigation-Derived Material Disposal (i.e., expendables, decon waste, cuttings):

Investigative-derived materials will be decontaminated in accordance with procedures listed above. The decontaminated material will be bagged and left on-site in appropriate waste containers with prior permission of site owner/operator

Sample Handling Procedures Including Protective Wear:

After samples have been collected, the outside of the sample bottles will be decontaminated by washing (not submerging) the bottles in an Alconox solution and rinsing in distilled water. The protective clothing level (i.e. suits, gloves, boots) worn during on-site job activities will be maintained while decontaminating the bottles. Respiratory protection will be worn based on professional judgement. Latex gloves, at a minimum, will be worn while handling the bottles after decontamination.

Team Member*

DAN KRIEG
STEVE SKARE
ALAN ALTUR
TIM CALLOWAY

Responsibility

Team Leader

Site Safety Officer

US - EPA - OSC

LEVEL 3 BACKUP/SAMPLER

*All entries into exclusion zone require Buddy System use. All E & E field staff participate in medical monitoring program and have completed applicable training per 29 CFR 1910.120. Respiratory protection program meets requirements of 29 CFR 1910.134, and ANSI Z88.2 (1980).

MEDTOX HOTLINE

- 1 Twenty-four hour answering service: (501) 370-8263

What to report:

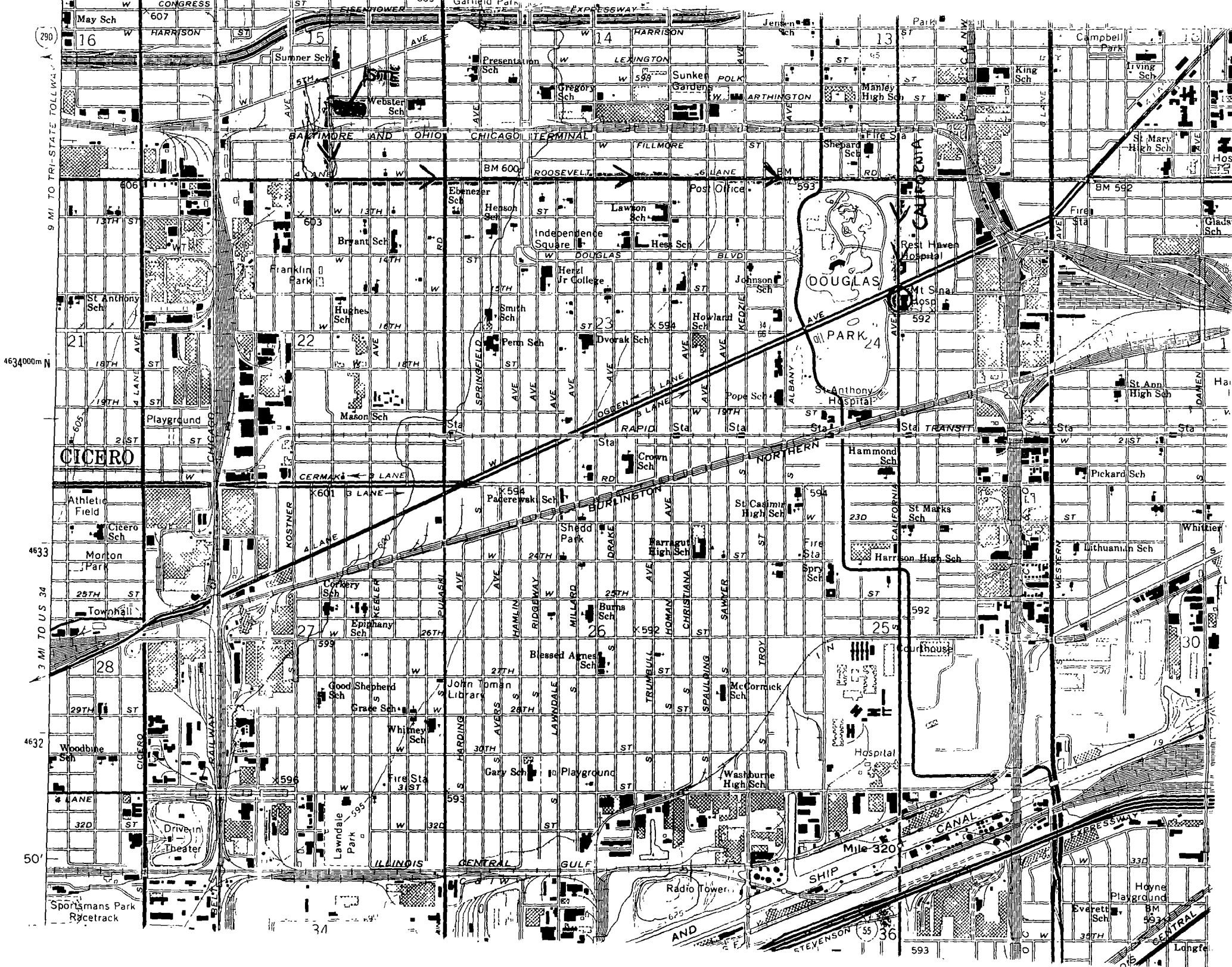
- State: "this is an emergency."
 - Your name, region, and site.
 - Telephone number to reach you.
 - Your location.
 - Name of person injured or exposed.
 - Nature of emergency.
 - Action taken.
2. A toxicologist, (Drs. Raymond Harbison or associate) will contact you. Repeat the information given to the answering service.
3. If a toxicologist does not return your call within 15 minutes, call the following persons in order until contact is made:
- a. 24 hour hotline - (716) 684-8940
 - b. Corporate Safety Director - Paul Jonmaire - home # (716) 655-1260
 - c. Assistant Corp. Safety Officer - Steven Sherman - home # (716) 688-0084
 - d. Chicago Health & Safety Manager - Dean Tiebout - home # (312) 338-4423

EMERGENCY ROUTES

(NOTE: Field Team must know Route(s) Prior to Start of Work)

Directions to hospital (include map) Leave ^{site} go south on Kildare to Roosevelt. TURN LEFT (EAST)
go down Roosevelt to CALIFORNIA TURN Right (south) to Ogden hospital
is at the corner of California + Ogden.

Emergency Egress Routes to Get off-Site TBD Exit site on Kildare, meet at corner of
Kildare + polk.



Warehouse Phone (312) 775-7763

P. EQUIPMENT CHECKLIST

Job/PAN _____

Team Leader _____

PROTECTIVE GEAR

Level A	No.	Level B	No.
SCBA		SCBA	3
SPARE AIR TANKS		SPARE AIR TANKS	3
ENCAPSULATING SUIT (Type _____)		PROTECTIVE COVERALL: Type <u>TYVEK/SARANEX</u>	
SURGICAL GLOVES (Latex)		SM _____ M _____ XL <u>6/6</u> -	<u>6/6</u>
NEOPRENE SAFETY BOOTS		BUTYL APRON	
BOOTIES (Latex)		SURGICAL GLOVES (LATEX)	1 Bx
GLOVES: Type _____		GLOVES: Type <u>neoprene</u>	
SM _____ M _____ L _____		SM _____ M _____ L _____	1 Bx
OUTER WORK GLOVES		NEOPRENE SAFETY BOOTS	
CASCADE SYSTEM		BOOTIES (LATEX)	9 pr.
5-MINUTE ESCAPE MASK		HEARD HAT	X
COOLING VEST		FACE SHIELD	
HARD HAT		MANIFOLD SYSTEM WITH AIRLINE	
		CASCADE SYSTEM	
		RAIN SUIT	
Level C		OUTER WORK GLOVES	
ULTRA-TWIN RESPIRATOR	X		
POWER AIR PURIFYING RESPIRATOR		Level D	
CARTRIDGES (Type <u>GMC-H</u>)	12	ULTRA-TWIN RESPIRATOR (Available)	
PROTECTIVE COVERALL: Type <u>TYVEK/SARANEX</u>		CARTRIDGES (Type _____)	
SM _____ M _____ L _____	<u>6/6</u>	5-MINUTE ESCAPE MASK (Available)	
BUTYL APRON		PROTECTIVE COVERALL: Type <u>TYVEK/SARANEX</u>	
SURGICAL GLOVES (LATEX)	1 Bx	SM _____ M _____ XL <u>6/6</u>	<u>6/6</u>
GLOVES: Type <u>neoprene</u>		OUTER WORK GLOVES	
SM _____ M _____ L _____	1 Bx	HEARD HAT	X
OUTER WORK GLOVES		FACE SHIELD	
GLOVE LINERS _____		RAIN SUIT	
FACE SHIELD		WINTER BOOTS	
HARDHAT	X	BOOTIES (LATEX)	9 pr.
RAIN SUIT		NEOPRENE SAFETY BOOTS	
NEOPRENE SAFETY BOOTS		STEEL TOED BOOTS	X
BOOTIES (LATEX)	9 pr.	SAFETY GLASSES	X
STEEL TOED BOOTS	X		

INSTRUMENTATION	No.	DECON EQUIPMENT	No.
OVA		WASH TUBS	
THERMAL DESORBER		BUCKETS	2
O2/EXPLOSIMETER W/CAL. KIT	X	SCRUB BRUSHES	1
PHOTOVAC TIP		PRESSURIZED SPRAYER	
HNu (Probe <u>10.2</u> OR <u>11.7</u>)	X	DETERGENT (Type <u>Alkonox</u>)	1
MAGNETOMETER		SOLVENT (Type _____)	
PIPE LOCATOR		PLASTIC SHEETING	
WEATHER STATION		TARPS AND POLES	
DRAEGER PUMP, TUBES _____		TRASH BAGS	
BRUNTON COMPASS		TRASH CANS	
MONITOX CYANIDE		MASKING TAPE	
HEAT STRESS MONITOR		DUCT TAPE	1 roll
NOISE EQUIPMENT _____		PAPER TOWELS	1 n
PERSONAL SAMPLING PUMPS (Type _____)		FACE MASK SANITIZER	
DUST MONITOR (MDA OR GCA System)		FOLDING CHAIRS	
		STEP LADDERS	
RADIATION EQUIPMENT		DISTILLED WATER	3 gallons
TLD BADGES	X		
DOCUMENTATION FORMS			
PORTABLE RATEMETER			
SCALER/RATEMETER	1	SAMPLING EQUIPMENT	
NaI Probe	1	60 OZ. AMBER GLASS BOTTLES	
InS Probe		1 L. AMBER GLASS BOTTLES	
GM Pancake Probe		40 ML. VIALS	
GM Side Window Probe		1 L. PLASTIC	
MICRO R METER / RAD-MINI		8 OZ. GLASS	12
ION CHAMBER		^{16 oz} 120 ML. GLASS	12
ALERT DOSIMETER		SPOONS	4
POCKET DOSIMETER		KNIVES	
		FILTER PAPER	
FIRST AID EQUIPMENT		PERSONAL SAMPLING PUMP SUPPLIES	
FIRST AID KIT	1	BUCK CALIBRATOR	
OXYGEN ADMINISTRATOR		HAND BAILERS	
STRETCHER		THIEVING RODS WITH SOLES	12
PORTABLE EYE WASH		DIOXIN SAMPLE KIT	
BLOOD PRESSURE MONITOR		PRESERVATIVES: HNO3 ⁴ NaOH Other _____	
FIRE EXTINGUISHER	1	STRING	

VAN EQUIPMENT	No.	MISCELLANEOUS (Cont.)	No.
TOOL KIT		HEARING PROTECTION	
HYDRAULIC JACK		LIFE VESTS	
LUG WRENCH		WALKIE-TALKIE	
TOW CHAIN		CONDUCTIVITY METER	
VAN CHECK OUT		PH METER	
Gas		CAMERA	1
oil		WATER-LEVEL INDICATOR	
Antifreeze		SPLIT SPOON SAMPLERS	
Battery		PVC HAND PUMP	
Windshield Wash		RESISTIVITY METER	
Tire Pressure		WELL POINT SAMPLER	
		ROBAIR PUMP SYSTEM	
MISCELLANEOUS		THERMOMETER	
CHALK		MASTERFLEX PUMP & FILTER APPARATUS	
LEVEL/TRIPOD AND ROD		SHIPPING EQUIPMENT	
BOWLS	2	COOLERS	2
PITCHER PUMP		PAINT CANS WITH LIDS, 7 CLIPS EACH	
SURVEYOR'S TAPE		VERMICULITE	
100 FIBERGLASS TAPE		DUST MASK	
300 NYLON ROPE		SHIPPING LABELS	
NYLON STRING		DOT LABELS: "DANGER"	
SURVEYING FLAGS		"UP"	
FILM	2 rolls	"INSIDE CONTAINER COMPLIES ..."	
WHEEL BARROW		"HAZARD GROUP"	
BUNG WRENCH	1	STRAPPING TAPE	
SOIL AUGER	1	BOTTLE LABELS	
PICK		BAGGIES	
SHOVEL	1	CUSTODY SEALS	
CATALYTIC HEATER		CHAIN-OF-CUSTODY FORMS	
PROPANE GAS		FEDERAL EXPRESS FORMS	
BANNER TAPE		CLEAR PACKING TAPE	
SURVEYING METER STICK			
CHAINING PINS & RING			
TABLES			
WEATHER RADIO			
BINOCULARS			
MEGAPHONE			

Vehicle Safety Checklist
Ecology & Environment, Inc.
Chicago Office

Date: _____ Time: _____ Odometer: _____
Vehicle Model: _____ Color: _____ License Plate No. _____

INTERIOR:

_____ All Safety Belts-Proper Locking
_____ Parking Brake

START ENGINE:

_____ Oil Pressure
_____ Instrument Panel
_____ (Warning Lights or Buzzers)
_____ Horn
_____ Windshield Wiper & Washer
_____ Heater/Defroster
_____ Mirrors
_____ Steering (Loose)
_____ Interior Lights
_____ Emergency Flashers
_____ Starts Properly

FRONT:

_____ Headlights (Dim/Bright)
_____ Turn Signals
_____ Emergency Flashers

REAR:

_____ Tail Lights
_____ Brake Lights
_____ Back up Lights
_____ Turn Signals
_____ Emergency Flashers

MECHANICAL OPERATION:

_____ Engine (misses, knocks, etc.)
_____ Check Oil
_____ Water/Anti-freeze
_____ Wiper Fluid
_____ Brake Fluid

OUTSIDE:

_____ Tires (properly inflated)
_____ Gas Tank Cap

EMERGENCY EQUIPMENT:

_____ Fire Extinguisher
_____ First Aid Kit
_____ Flags, Flares,
_____ Spare tire (properly inflated)
_____ Tire Changing Kit
_____ (jack, tools, etc.)

REMARKS:

TEAM MEMBER/OPERATOR: _____

(print name)

signature

SITE NAME/ADDRESS: _____

PAN/JOB NUMBER: _____

RETURN OF VEHICLE TO DUTY STATION

Vehicle Cleanliness: _____

Remarks: _____

Corrections Necessary: _____

TEAM MEMBER/OPERATOR: _____

(print name)

signature

Date: _____ Time: _____ Odometer: _____

SITE SAFETY MEETING
(Must be filled out by Site Safety Officer at the site)

Project _____ TDD: _____ PAN #: _____
Site Safety Officer: _____ Date _____ Time _____
Address: _____
Type of Work: _____

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment: _____

Chemical Hazards: _____

Physical Hazards: _____

Radiation Hazards: _____

Emergency Procedures: _____

Hospital/Clinic: _____ Telephone: _____

Hospital Address: _____ Emergency Telephone #: _____

Special Equipment: _____

Others: _____

Checklist

1. Emergency information reviewed? Y / N and made familiar to all team members? Y / N
2. Route to nearest hospital explained and reviewed? Y / N and its location known to all team members? Y / N
3. Site safety plan readily available and its location known to all team members? Y / N

The site safety meeting shall be attended by all personnel who will be working within the site area. Daily informational update meetings will be held when site tasks and conditions change.

ATTENDANCE

PRINT NAME	SIGNATURE	DATE
<u>DAN KRIEG</u>	<u>Dan Krieg</u>	<u>8/15/94</u>
<u>Steve Skare</u>	<u>Steve Skare</u>	<u>8/16/94</u>
<u>Tim Calloway</u>	<u>Timothy Calloway</u>	<u>8/16/94</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

MEETING CONDUCTED BY: _____

ECOLOGY AND ENVIRONMENT, INC. - CHICAGO

Site Name: _____ PAN/TDD#: _____
 Date: _____ Wind Direction: _____ Weather: _____

EQUIPMENT	ID#	CALIB./OPER. CHECK	INITIALS & DATE	BACKGROUND READING	ON-SITE READING
OVA					
HNu					
Photovac Tube					
O2 Meter					
Exposimeter					
Combo-meter					
Rad-MINI					
Monitor-4					
Draeger tubes					
Monitox					
OTHERS:					

Attendees at Site: _____

Protective Clothing Worn: _____

Comments on Monitoring or Protective Clothing (ex: Was the monitoring equipment possibly effected by the weather?) _____

Team Leader _____ (Print Name) _____ (Signature) _____ (Date)

Site Safety Officer _____ (Print Name) _____ (Signature) _____ (Date)

Please submit the original to Ron Bugg and a copy to the project file

SITE DIAMETER LOG

PROJECT/PAN # _____

SITE NAME _____

SITE SAFETY OFFICER _____

WEEK OF _____

**NAME AND
DOSIM. #**

MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY SUNDAY

[illegible]

To the nearest half-hour, record time spent downrange as "S" (e.g., S:2.5hrs), time spent in active PDS operation as "P", and any time spent downrange in rescue activity as "R".

THE SIGMA-ALDRICH LIBRARY OF CHEMICAL SAFETY DATA

Explanation of Codes

PROCEDURES FOR SPILLS OR LEAKS

- 1 Absorb on sand or vermiculite and place in closed container for disposal.
- 2 Cover with dry lime, sand, or soda ash. Place in covered containers using nonsparking tools and transport outdoors.
- 3 Shut off all sources of ignition.
- 4 Evacuate area.
- 5 Cover with an activated carbon adsorbent, take up and place in closed container. Transport outdoors.
- 6 Ventilate area and wash spill site after material pickup is complete.
- 7 Sweep up, place in a bag and hold for waste disposal.
- 8 Avoid raising dust.
- 9 Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.
- 10 Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.
- 11 Cover with dry lime or soda ash, pick up, keep in a closed container and hold for waste disposal.
- 12 Carefully sweep up and remove.
- 13 Flush spill area with copious amounts of water.
- 14 Mix with solid sodium bicarbonate.
- 15 Place in appropriate container.
- 16 Wear protective equipment.
- 17 Wash spill site with soap solution.
- 18 Please contact the Technical Services Department. Be sure to mention the name and catalog number of the material.

FIRE-EXTINGUISHING MEDIA

- 1 Carbon dioxide.
- 2 Dry chemical powder.
- 3 Water spray.
- 4 Alcohol or polymer foam.
- 5 Class D fire-extinguishing material only.
- 6 Water may be effective for cooling, but may not effect extinguishment.
- 7 Carbon dioxide, dry chemical powder, alcohol or polymer foam.
- 8 Foam and water spray are effective but may cause frothing.
- 9 Do not use dry chemical powder extinguisher on this material.
- 10 Do not use carbon dioxide extinguisher on this material.
- 11 Noncombustible.
- 12 Do not use water.
- 13 Use extinguishing media appropriate to surrounding fire condition



OILS: DIESEL

ODS

Common Synonyms Fuel oil 1-D Fuel oil 2-D	Only liquid Floats on water	Yellow-brown	Lube or fuel oil odor
Stop discharge if possible Call fire department Avoid contact with liquid Isolate and remove discharged material Notify local health and pollution control agencies			
Fire	Combustible Flammable Irritant Water may be ineffective on fire Cool exposed containers with water		
Exposure	CALL FOR MEDICAL AID LIQUID Irritating to skin and eyes. Remove contaminated clothing and shoes Flush affected areas with plenty of water If EYES affected, flush eyes open with plenty of water IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk DO NOT INDUCE VOMITING		
Water Pollution	Dangerous to aquatic life in high concentrations. Not likely to bioaccumulate. May be dangerous if it enters water intakes. Notify local health and welfare officials. Notify operators of nearby water intakes.		
1. RESPONSE TO DISCHARGE (See Response Methods Handbook) Mechanical containment Should be removed Chemical and physical treatment	2. LABEL 2.1 Category: None 2.2 Class: Not pertinent		
3. CHEMICAL DESIGNATIONS 3.1 CG Compatibility Class: Miscellaneous Hydrocarbon Mixtures 3.2 Formulas: Not applicable 3.3 HMOSUM Designations: 3.1/1270 3.4 DOT ID No.: 1270 3.5 CAS Registry No.: Data not available	4. OBSERVABLE CHARACTERISTICS 4.1 Physical State (as shipped): Liquid 4.2 Color: Light brown 4.3 Odor: Like fuel oil		
5. HEALTH HAZARDS 5.1 Personal Protective Equipment: Goggles or face shield. 5.2 Symptoms Following Exposure: If liquid is ingested, an increased frequency of bowel movements will occur. 5.3 Treatment of Exposure: INGESTION: do NOT induce vomiting. SKIN: wash off, wash with soap and water. EYES: wash with copious amounts of water for at least 15 min. 5.4 Threshold Limit Value: No single TLV applicable. 5.5 Short Term Exposure Limit: Data not available 5.6 Toxicity by Ingestion: Grade 1, LD ₅₀ = 5 to 15 g/kg 5.7 Lethal Toxicity: Data not available 5.8 Vapor (Gas) Irritant Characteristics: Vapors cause a slight stinging of the eyes or respiratory system if present in high concentrations. The effect is temporary. 5.9 Liquid or Solid Irritant Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause staining and reddening of the skin. 5.10 Odor Threshold: Data not available 5.11 IDLH Value: Data not available			

6. FIRE HAZARDS 6.1 Flash Point (1-D) (100°F C C (2-D) 125°F C C 6.2 Flammable Limits in Air: 1.3-8.0 vol % 6.3 Fire Extinguishing Agents: Dry chemical, foam, or carbon dioxide 6.4 Fire Extinguishing Agents Not to be Used: Water may be ineffective 6.5 Special Hazards of Combustion Products: Not pertinent 6.6 Behavior in Fire: Not pertinent 6.7 Ignition Temperature (1-D) 350-525°F (2-D) 480-545°F 6.8 Electrical Hazard: Not pertinent 6.9 Burning Rate: 4 mm/min. 6.10 Additional Flame Temperature: Data not available 6.11 Stationary-to-Air-to-Fuel Ratio: Data not available 6.12 Flame Temperature: Data not available	10. HAZARD ASSESSMENT CODE (See Hazard Assessment Handbook) A-T-J
7. CHEMICAL REACTIVITY 7.1 Reactivity With Water: No reaction 7.2 Reactivity With Common Materials: No reaction 7.3 Stability During Transport: Stable 7.4 Neutralizing Agents for Acids and Bases: Not pertinent 7.5 Polymerization: Not pertinent 7.6 Inhibitor of Polymerization: Not pertinent 7.7 Molten Ratio (Resistant to Products): Data not available 7.8 Reactivity Group: 33	11. HAZARD CLASSIFICATIONS 11.1 Code of Federal Regulations: Combustible liquid 11.2 MMS Hazard Rating for Bulk Water Transportation: Not listed 11.3 MFPA Hazard Classification: Category: Classification Health Hazard (Blue) 0 Flammability (Red) 2 Reactivity (Yellow) 0
8. WATER POLLUTION 8.1 Aquatic Toxicity: 204 mg/l/24 hr/Invertebrate American shad/TL ₅₀ /salt water 8.2 Waterway Toxicity: >20 ml/kg /LD ₅₀ /mollusks 8.3 Biological Oxygen Demand (BOD ₅): Data not available 8.4 Food Chain Concentration Potential: None	12. PHYSICAL AND CHEMICAL PROPERTIES 12.1 Physical State at 15°C and 1 atm: Liquid 12.2 Molecular Weight: Not pertinent 12.3 Boiling Point at 1 atm: 550-640°F = 288-338°C = 561-612°K Freezing Point: 0 to -30°F = -18 to -34°C = 255 to 239°K Critical Temperature: Not pertinent 12.6 Critical Pressure: Not pertinent 12.7 Specific Gravity: 0.841 at 15°C (liquid) 12.8 Liquid Surface Tension: (est.) 25 dyne/cm = 0.025 N/m at 20°C 12.9 Liquid Water Interfacial Tension: (est.) 50 dyne/cm = 0.05 N/m at 20°C 12.10 Vapor (Gas) Specific Gravity: Not pertinent 12.11 Ratio of Specific Heats of Vapor (Gase): Not pertinent 12.12 Latent Heat of Vaporization: Not pertinent 12.13 Heat of Combustion: -18,400 Btu/lb = -10,200 cal/g = -429 X 10 ³ J/kg 12.14 Heat of Dissolution: Not pertinent 12.15 Heat of Solution: Not pertinent 12.16 Heat of Polymerization: Not pertinent 12.17 Heat of Fusion: Data not available 12.18 Limiting Value: Data not available 12.19 Heat Vapor Pressure: Variable
9. SHIPPING INFORMATION 9.1 Grades of Purity: Diesel Fuel 1-D (ASTM); Diesel Fuel 2-D (ASTM) 9.2 Storage Temperature: Ambient 9.3 Inert Atmosphere: No requirement 9.4 Venting: Open (flame arrester)	NOTES

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JOB NO ZT2051

ecology and environment. inc.
HAZARD EVALUATION OF CHEMICALS

PREPARATION/UPDATE DATE 5/13/93

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CHEMICAL NAME: FUEL OIL, #4

CAS NUMBER: DOT NAME/ID NO.: COMBUSTIBLE LIQUID UN 1223

RQ.

SYNONYMS: RESIDUAL FUEL OIL

CHEMICAL AND PHYSICAL PROPERTIES:

CHEMICAL FORMULA: MOLECULAR WEIGHT: PHYSICAL STATE: SPG/D 0 904 SOLUBILITY (H2O):
VAPOR PRESS. FREEZING POINT: -20 - +15 F BOILING POINT: 214 - >1092F FLASH POINT: >130 F FLAMMABLE LIMITS: 1.0 - 5.0 %
ODOR CHARACTERISTICS: LUBE OR FUEL OIL
INCOMPATIBILITIES: OXIDIZERS

BIOLOGICAL PROPERTIES:

IDLH: TLV-TWA: PEL: ODOR THRESHOLD:
HUMAN (LCLO): RAT/MOUSE (LC50): AQUATIC:
CARCINOGEN: TERATOGEN: MUTIGEN
ROUTE OF EXPOSURE: [X] INHALATION [X] EYE CONTACT [X] SKIN CONTACT [X] INGESTION

HANDLING RECOMMENDATIONS (PERSONAL PROTECTIVE MEASURES):

NORMALLY LEVEL D, IN CONFINED SPACES USE AIR SUPPLIED RESPIRATORS; GLOVES AND PROTECTIVE COVERALLS

MONITORING RECOMMENDATIONS:

HNU, OVA, OXYGEN LEVEL; EXPLOSIVE METER

HEALTH HAZARDS:

ACUTE SYMPTOMS:

CHRONIC SYMPTOMS:

FIRST AID

INHALATION: REMOVE TO FRESH AIR, GIVE ARTIFICIAL RESPIRATION IF NEEDED, SEEK MEDICAL ATTENTION
EYE CONTACT: FLUSH/RINSE WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES
SKIN CONTACT: REMOVE CONTAMINATED CLOTHING; WASH WITH SOAP AND WATER
INGESTION: DO NOT INDUCE VOMITING; SEEK MEDICAL ATTENTION IMMEDIATELY

DISPOSAL/WASTE TREATMENT:

FEDERAL DISPOSAL REQUIREMENTS BASED UPON FLASH POINT OF WASTE (40 CFR 261); STATE REQUIREMENTS VARY

REFERENCES CONSULTED: [] VERSCHUERAN [] MERCK INDEX [] HAZARDLINE [] ACGIH [] TOXIC & HAZARDOUS SAFETY MANUAL [X] CHRIS [] SAX
[] NIOSH/OSHA POCKET GUIDE
[] OTHER:

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JOB NO ZT2051

ecology and environment. inc.
HAZARD EVALUATION OF CHEMICALS

PREPARATION/UPDATE DATE 7/22/93

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CHEMICAL NAME: FUEL OIL, #2

CAS NUMBER: DOT NAME/ID NO.: COMBUSTIBLE LIQUID UN 1223

RQ.

SYNONYMS: HOME HEATING OIL

CHEMICAL AND PHYSICAL PROPERTIES:

CHEMICAL FORMULA: MOLECULAR WEIGHT: PHYSICAL STATE: LIQUID SPG/D 0.879 SOLUBILITY (H2O): INSOLUBLE
VAPOR PRESS: FREEZING POINT: -20 F BOILING POINT: 540.- 640 F FLASH POINT: 136 F FLAMMABLE LIMITS:
ODOR CHARACTERISTICS: LUBE OR FUEL OIL
INCOMPATIBILITIES. OXIDIZERS

BIOLOGICAL PROPERTIES:

IDLH: TLV-TWA: PEL: ODOR THRESHOLD:
HUMAN (LCLO). RAT/MOUSE (LC50): AQUATIC:
CARCINOGEN: TERATOGEN: MUTIGEN:
ROUTE OF EXPOSURE: [X] INHALATION [X] EYE CONTACT [X] SKIN CONTACT [X] INGESTION

HANDLING RECOMMENDATIONS (PERSONAL PROTECTIVE MEASURES):

NORMALLY LEVEL D; IN CONFINED SPACES USE AIR SUPPLIED RESPIRATORS; GLOVES AND PROTECTIVE COVERALLS

MONITORING RECOMMENDATIONS:

HNU, OVA, OXYGEN LEVEL; EXPLOSIVE METER

HEALTH HAZARDS:

ACUTE SYMPTOMS: HEADACHE, NAUSEA, VOMITING, CRAMPING

CHRONIC SYMPTOMS: CENTRAL NERVOUS SYSTEM DEPRESSION, KIDNEY AND LIVER DAMAGE

FIRST AID

INHALATION: REMOVE TO FRESH AIR, GIVE ARTIFICIAL RESPIRATION IF NEEDED, SEEK MEDICAL ATTENTION
EYE CONTACT: FLUSH/RINSE WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES
SKIN CONTACT: REMOVE CONTAMINATED CLOTHING; WASH WITH SOAP AND WATER
INGESTION: DO NOT INDUCE VOMITING, SEEK MEDICAL ATTENTION IMMEDIATELY

DISPOSAL/WASTE TREATMENT:

FEDERAL DISPOSAL REQUIREMENTS BASED UPON FLASH POINT OF WASTE (40 CFR 261); STATE REQUIREMENTS VARY

REFERENCES CONSULTED: [] VERSCHUERAN [] MERCK INDEX [] HAZARDLINE [] ACGIH [] TOXIC & HAZARDOUS SAFETY MANUAL [X] CHRIS [] SAX
[] NIOSH/OSHA POCKET GUIDE
[] OTHER:

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**915 S. KILDARE
T05-9406-024
SITE ASSESSMENT**

The 915 S. Kildare site is a former concrete construction debris dumping site which is located in Chicago, Illinois. Non-permitted dumping of construction waste materials occurred during the late 1980's and early 1990's. The City of Chicago approached the U.S. EPA to investigate the site for possible contamination. TAT was tasked to perform a site inspection and possibly collect samples if needed. TAT had completed a health and safety plan for the site assessment on August 3, 1994. This scheduled site assessment was canceled by the OSC and rescheduled for August 16, 1994. On August 16, 1994 TAT performed the site inspection and collected three soil samples. The samples were delivered to NET Midwest, Inc. for analysis of TCLP metals, TCLP volatiles, TCLP semi-volatiles and Total PCBs. No contaminants were found in any of the three soil samples. The site assessment report and data validation are in the process of being completed. Activities assigned under this TDD which have not been completed will be reassigned under a new TDD during fiscal year 1995.